WHAT IS CLAIMED IS:

1. A method for driving a liquid crystal display, comprising the steps of:

receiving source data;

reducing the number of bits of the source data, thereby generating a reduced-bit source data;

comparing the reduced-bit source data of a previous frame with the reduced-bit source data of a current frame to select a preset modulated data in accordance with the result of the comparison; and

modulating the source data by using the selected modulated data.

2. The method of claim 1, wherein the selected modulated data is set to be a minimum value within a data band that includes a plurality of initial modulated data, wherein each of the initial modulated data is larger than a current data value of the current frame, when the current data value of the current frame is larger than a previous data value of a previous frame.

3. The method of claim 1, wherein the selected modulated data is set to be a maximum value within a data band that includes a plurality of initial modulated data, wherein each of the initial modulated data is smaller than a current data value of the current frame, when the current data value of the current frame is smaller than a previous

data value of a previous frame.

4. The method of claim 1, wherein the source data is modulated to a current data value of the current frame, in the step of modulating the source data, when the current data value of a current frame is the same as a previous data value of the previous frame.

5. The method of claim 1, further comprising the step of delaying the reduced-bit source data by one frame interval.

6. The method of claim 5, wherein the source data is an 8-bit data, and the reduced-bit source data is a 7-bit data.

7. A method for driving a liquid crystal display, comprising:

setting a first modulated data that has a larger value than a data value of a current frame in accordance with an increase of the data value;

setting a second modulated data that has a smaller value than the data value of the current frame in accordance with a decrease of the data value;

storing in a storage memory an n-bit source data, wherein n is a positive integer;

determining whether a source data of the current frame is identical in n-k bits to a source data of the previous frame stored in the storage memory, wherein k is a positive integer less than n; and

supplying the source data of the current frame to a liquid crystal display panel or modulating the source data by using the first and second modulated data in accordance with a result of the judging step.

8. The method of claim 7, wherein n is 8 and k is 1.

9. The method of claim 7, wherein the supplying the source data includes:

supplying the source data of the current frame to the liquid crystal display panel, when the source data value of the current frame identical to the source data value of the previous frame; and

comparing n-k bits from the source data of the current frame with corresponding n-k bits from the source data of the previous frame, wherein k is a positive integer less than n, to modulate the source data by using the first and second modulated data, when the source data value of the current frame differs from the source data value of the previous frame.

10. The method of claim 9, wherein modulating the source data includes:

modulating the source data by using the first modulated data, when the source data value of the current frame is larger than the source data value of the previous frame; and

modulating the source data by using the second modulated data, when the source data value of the current frame is smaller than the source data value of the previous frame.

11. An apparatus for driving a liquid crystal display, comprising:

an input line for receiving source data;

a bit converter for reducing the number of bits of the received source data to generate reduced bit source data; and

a modulator for comparing the reduced bit source data of a current frame with the reduced bit source data of a previous frame to modulate the source data by using a preset modulated data in accordance with a result of the comparison.

12. The apparatus of claim 11, wherein the selected modulated data is set to be a minimum value within a data band that includes a plurality of initial modulated data, and each of the initial modulated data is larger than a current data value of the current frame, when the current data value of the current frame is larger than a previous data value of the previous frame.

13. The apparatus of claim 11, wherein the selected modulated data is set to be a maximum value within a data band that includes a plurality of initial modulated data, and each of the initial modulated data is smaller than a current data value of the current frame, when the current data value of the current frame is smaller than a previous data value of the previous frame.

14. The apparatus of claim 11, wherein the source data is modulated to a current data value of the current frame, when the current data value of the current frame is the same as a previous data value of the previous frame,.

15. The apparatus of claim 11, wherein the modulator includes:

a frame memory for delaying the reduced-bit source data for one frame interval; and

a lookup table for comparing the reduced-bit source data of the previous frame with the reduced-bit source data of the current frame to select a preset modulated data in accordance with the result of the comparison.

16. The apparatus for driving according to claim 15, wherein the bit converter is connected between the frame memory and an input terminal of the lookup table.

17. The apparatus for driving according to claim 11, wherein the source data is an 8-bit data, and the reduced-bit source data is a 7-bit data.

18. An apparatus for driving a liquid crystal display, comprising:

a liquid crystal display panel comprising a plurality of data lines, and a plurality of gate lines, wherein the data lines cross the gate lines, and a liquid crystal cell is formed at a pixel area between a data line and a gate line;

an input line for receiving n-bit source data, wherein n is a positive integer;

a storage memory for storing the received source data;

a comparator for determining whether the source data of a current frame is identical in n-k bits to the source data of a previous frame stored in the storage memory, wherein k is a positive integer less than n; and

a modulator for registering a first modulated data that has a larger value than a data value of the current frame in accordance with an increase of the data value, and a second modulated data that has a smaller value than the data value of the current frame in accordance with a decrease of the data value, and supplying the source data of the current frame to the liquid crystal display panel, or modulating the source data by using the first and second modulated data in accordance with a judgment result of the comparator.

19. The apparatus of claim 18, wherein the comparator supplies the data of the current frame to the liquid crystal display panel when the data value is the same between the previous frame and the current frame, and supplies the source data of the current frame and the source data of the previous frame to the modulator when the data value is not the same between the previous frame and the current frame.

20. The apparatus of claim 18, wherein the modulator compares n-k bits of the source data of the current frame with corresponding n-k bits of the source data of the previous frame, wherein k is a positive integer less than n, modulates the source data by using the first modulated data if the source data value is larger in the current frame than in the previous frame, and modulates the source data by using the second modulated data if the source data value is lower in the current frame than in the previous frame.

21. The apparatus of claim 18, further comprising:

a data driver for supplying the modulated data from the modulator to the data line of the liquid crystal display panel;

a gate driver for supplying a scan signal to the gate line of the liquid crystal display panel; and

a timing controller for controlling the data driver and the gate driver.

22. The apparatus of claim 21, wherein the modulator is a lookup table integrated into the timing controller.

23. The apparatus of claim 18, wherein n is 8, and k is 1.